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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/806,909	<b>Applicant(s)</b> BESSLER ET AL.	
	<b>Examiner</b> Adrian J. McPhillip	<b>Art Unit</b> 3623	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4,8,9,11-15,20-33 and 35-38 is/are pending in the application.
- 4a) Of the above claim(s) none is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 8, 9, 11-15, 20-33, and 35-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20100312</u>  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### **Continued Examination Under 37 CFR 1.114**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 19, 2010 has been entered.
2. This Non-Final Office Action is in response to Applicant's request for continued examination filed on March 19, 2010. Claims 1, 4, 11, 12, 20 and 36-38 have been amended. Claims 2, 3, 5-7, 10, 16-19 and 34 were previously cancelled. Currently claims 1, 4, 8, 9, 11-15, 20-33, and 35-38 are pending in this application.

### **Response to Amendment**

3. Applicant's amendments to the claims are sufficient to overcome the 35 U.S.C. 101 and 112 rejections set forth in the previous office action. Accordingly these rejections have been withdrawn.

### **Response to Arguments**

4. Applicant's arguments filed March 19, 2010 have been fully considered.
5. Applicant argues first that Helmus does not expressly or inherently disclose a first computer system and a second computer system having a different architecture than the

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first computer system (See page 20 of submitted Remarks). This argument is primarily directed to features which the Applicant has newly added via amendment, specifically wherein each computer system comprises different architectures, therefore this is now the Examiner's first opportunity to consider these limitations in view of the prior art. As such any arguments regarding these limitations would be inappropriate since they have not yet been examined. This argument is rendered moot in view of the newly issued rejections presented later in this Office Action.

6. Applicant also argues that Helmus does not disclose each computer system comprising an application that writes application data to log file and a log agent that writes resource data to a resource log file. The Examiner respectfully disagrees and notes ¶ [0057]-[0061] wherein a variety of processors are disclosed which handle different events in the order processing workflow. For example, the order review processor, the order header processor and the workflow processor are some of the high level applications which monitor events, such as Image Processing and Exception Handling, in the order processing workflow. Furthermore ¶ [0093]-[0094] and fig. 18 disclose a plurality of protocols. Each order will have a set of protocols which must be resolved so that the order can be completed. These protocols represent sub activities/events, which must be processed before an order can be completed, and are often times implemented by specific applications/instruments as illustrated by fig 18. The system stores and tracks these protocols in memory, and it is these memory files (see claim 44), which house the various protocols and processor information, that are equivalent to the Applicant's log files. Fig. 18 also clearly illustrates that each of these log files is constantly monitoring the parameters/data that pertain to its specific function in the order processing process.

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Helmus also discloses a log agent that writes resource data to a resource log file (see at least ¶ [0060] wherein the information being monitored and stored in the system's memory files includes resource information). ¶ [0136] of Helmus discloses that the invention is meant to operate on multiple computer systems that each performs the various processor functionalities). Therefore the reference teaches each of the disputed limitations and this argument is found unpersuasive.

7. Applicant also argues that Helmus does not teach a plurality of log adapters that communicates with and extracts information from a corresponding log file. Examiner disagrees and notes ¶ [0060] wherein the Command and Control Processor is in communication with each system processor and provides an interface through which real time information regarding, for example, system queues, order location, system resources, and system production are displayed, managed and processed. The CC processor therefore extracts the various protocol/processor information from each of their corresponding memory files and displays it for the user. Accordingly this argument is unpersuasive.

8. Finally Applicant argues that, Helmus does not disclose a first and second application that processes a portion of an order. Examiner respectfully disagrees and notes that each of the queues represented by Fig. 18 of Helmus is associated with an application that processes a portion of the order. Applicant's own example on page 24 of the submitted Remarks supports this by stating that, "For example, Applicants note paragraphs 0089-0099 of Helmus which discloses, "An order is obtained from a work queue at 700. A determination is made at 705 whether the patient information is correct...Upon completion of all the prescriptions in an order and/or all the order elements

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being found correct, the order is submitted to a dispensing pharmacy queue at 760." The determination step referenced by the citation is clearly processing a portion of the order, specifically the patient verification portion that is required before the order can be moved to the next step. This verification done by one of the application referenced in Fig. 18. just as the dispensing portion of the order is done by an application based on the pharmacy queue of 760. Each application is even given a name that clearly reflects the order function that it handles, for example HandleAdminProtocol or HandleProfessionalProtocol (see fig 18). Therefore Helmus does disclose a first and second application that processes a portion of an order, And this argument is found unpersuasive.

9. Applicants remaining arguments all depend from the above arguments which have been found unpersuasive and/or moot. Accordingly these remaining arguments are also unpersuasive for the reasons set forth above.

### **Claim Rejections - 35 USC § 103**

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 1, 4, 11, 12 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helmus (US 20030225595 A1) in view of Examiner's Official Notice.

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12. Regarding **claim 1**, Helmus discloses a system for monitoring events processed by event processing applications implemented on computer systems, the event processing monitor comprising:

A first computer system comprising:

- at least one processor (see ¶ [0136] wherein the disclosed invention has an embodiment wherein multiple different systems/computers perform each of the various processor functionalities. Therefore there is an embodiment of the invention that includes multiple computer systems performing the claimed functionality);
- a first application stored in a memory and executable by the first computer system to process a first portion of an order and write first application data to a first application log file, the first application data related to the processing of the first portion of the order by the first application (see at least ¶ [0057]-[0061] wherein a variety of processors are disclosed which handle different portions of the order processing workflow. For example, the order review processor, the order header processor and the workflow processor are some of the high level applications which monitor the Image Processing and Exception Handling parts of the order. Furthermore ¶ [0093]-[0094] and fig. 18 disclose a plurality of protocols. Each order will have a set of protocols which must be resolved so that the order can be completed. These protocols are each associated with portions of the order which must be processed before the order as a whole can be completed, and are often times implemented by specific applications/instruments as illustrated by fig 18. The system stores and tracks

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these protocols in memory, and it is these memory files (see claim 44), which house the various protocols and processor information, that are equivalent to the Applicant's log files. Fig. 18 also clearly illustrates that each of these log files is constantly monitoring the parameters/data that pertain to its specific function in the order processing process).

- a first log agent stored in a memory and executable by the first computer system to monitor a first resource data related to the first computer system used by the first application to process at least some of the first portion of the order and write the first resource data to a first resource log file (see at least ¶ [0060] wherein the information being monitored and stored in the system's memory files includes resource information).

A second computer system comprising:

- at least one processor (see ¶ [0136] wherein the disclosed invention has an embodiment wherein multiple different systems/computers perform each of the various processor functionalities. Therefore there is an embodiment of the invention that includes multiple computer systems performing the claimed functionality);
- a second application stored in a memory and executable by the second computer system to process a second portion of the order and write second application data to a second application log file, the second application data related to the processing of the second portion of the order by the second application (see at least ¶ [0057]-[0061] wherein a variety of processors are disclosed which handle different events in the order processing workflow. For



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example, the order review processor, the order header processor and the workflow processor are some of the high level applications which monitor events, such as Image Processing and Exception Handling, in the order processing workflow. Furthermore ¶ [0093]-[0094] and fig. 18 disclose a plurality of protocols. Each order will have a set of protocols which must be resolved so that the order can be completed. These protocols represent sub activities/events, which must be processed before an order can be completed, and are often times implemented by specific applications/instruments as illustrated by fig 18. The system stores and tracks these protocols in memory, and it is these memory files (see claim 44), which house the various protocols and processor information, that are equivalent to the Applicant's log files. Fig 18. also clearly illustrates that each of these log files is constantly monitoring the parameters/data that pertain to its specific function in the order processing process. It is further noted that in ¶ [0136] the disclosed invention has an embodiment wherein different systems/computers perform each of the various processor functionalities).

- a second log agent stored in a memory and executable by the second computer system to monitor a second resource data related to the second computer system used by the second application to process at least some of the second portion of the order and write the second resource data to a second resource log file (see at least ¶ [0060] wherein the information being monitored and stored in the system's memory files includes resource information and ¶

[0136] wherein the disclosed invention has an embodiment where different systems/computers perform each of the various processor functionalities).

- a plurality of log adapters, each stored in a memory and executable by a processor to communicate with a corresponding one of the first application log file, the second application log file, the first resource log file, and the second resource log file to extract at least a portion of the corresponding one of the first application data, the second application data, the first resource data, and the second resource data (see at least ¶ [0060] wherein the Command and Control Processor is in communication with each system processor and provides an interface through which real time information regarding, for example, system queues, order location, system resources, and system production is displayed, managed and processed. The CC processor therefore extracts the various protocol/processor information from each of their respective memory files and displays it for the user.);
- a third computer system (see ¶ [0136] wherein the disclosed invention has an embodiment wherein multiple different systems/computers perform each of the various processor functionalities. Therefore there is an embodiment of the invention that includes multiple computer systems performing the claimed functionality) comprising a monitor component stored in a memory and executable by a processor to communicate with the plurality of log adapters, and determine event status information related to the order using the at least the portion of the first application data, the at least the portion of the second application data, the at least the portion of the first resource data, and the at

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least the portion of the second resource data (see at least ¶ [0060], [0124]-[0125] as well as figures 17-18 of Helmus, which disclose the command and control module (CC module) as, “a user interface that sits atop the order processing system. The Command and Control module tracks work queue activity, individual user activity, process control information, system production and system resource availability.” Therefore, as further illustrated by the sections of ¶ 124 included in the Applicant's remarks, the CC module monitors a plurality of work queues wherein each work queue corresponds to a particular application, or set of protocols, that is processing an aspect of the ordering process. Figure 18 illustrates this very well as it shows an example of the various instruments/applications that make up the order processing system. Each queue/application is clearly handling a specific function, for example HandleAdminProtocol or HandleProfessionalProtocol, and the CC module monitors, extracts and aggregates both application and resource data from the various applications. Additionally ¶ [0125] discloses that the CC processor produces status reports on any single, or combination of, system data item(s)).

Helmus does not explicitly disclose that the various systems referenced in ¶ [0136] to be performing the disclosed steps and functionalities have different architectures.

The Examiner hereby takes official notice that it was well known to those of ordinary skill in the art, at the time of the invention, for different computing systems to have different architectures and still be able to interact and share information regarding the execution of certain processes, including workflow/business processes. For example in supply chain management it was well known for clients to each have versions of a

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software client running on their own personal computers, wherein the computers themselves may have any number of different architectures. For example some might have 1GB of RAM while others may have 2GB, or there may be any number of minor differences in the hardware architectures of the systems themselves; and yet despite these architecture differences clients are still able to implement/access software that updates them on the operations of the supply chain and to interact with each other by sending notifications, order updates etc. without requiring that every single client in the entire supply chain system have completely identical computer architectures. It would have been obvious to modify the invention of Helmus so that the various computer systems referenced in ¶ [0136] include computer systems that have different architectures in order to ensure that the invention is as flexible, and therefore useful as possible. This would allow Helmus' order processing system to be applied to a much wider variety of computing systems which would improve the overall utility of the invention.

Regarding **claim 4**, Helmus discloses a system for monitoring events processed by event processing applications implemented on computer systems, wherein the monitor component is further executable to aggregate the at least the portion of the first application data and the at least the portion of the second application data to determine a current status of at least one of the first portion of order and the second portion of the order (see at least ¶ [0060], [0124]-[0125] as well as figures 17-18 of Helmus, which disclose the command and control module (CC module) as, "a user interface that sits atop the order processing system. The Command and Control module tracks work queue activity, individual user activity, process control information, system production and system resource availability." Therefore, as further illustrated by the sections of ¶ 124

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included in the Applicant's remarks, the CC module monitors a plurality of work queues wherein each work queue is associated with a particular application, or set of protocols, that is processing an aspect/portion of the order. Figure 18 illustrates this very well as it shows an example of the various instruments/applications that make up the order processing system. Each queue/application set is clearly handling a specific portion of the order, for example HandleAdminProtocol or HandleProfessionalProtocol, and the CC module monitors, extracts and aggregates both application and resource data from the various applications. Additionally ¶ [0125] discloses that the CC processor produces status reports on any single, or combination of, system data item(s)).

Regarding **claim 11**, Helmus discloses a system for monitoring events processed by event processing applications implemented on computer systems, wherein the monitor component is further executable to determine event status information during processing of at least one of the first portion of the order and the second portion of the order by at least one of the first application and the second application (¶ [0125] discloses that the CC processor produces status reports on any single, or combination of, system data item(s) including those data items that represent portions of the order process being executed).

Regarding **claim 12**, Helmus discloses a system for monitoring events processed by event processing applications implemented on computer systems, wherein at least one of the first application data and the second application data includes a name associated with an application processing the order (see fig 18 wherein the Archive agent is among the exemplary named applications and protocols which are working to process an order) and at least one time stamp associated with when the application processes portions of at

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least one of the first portion of the order and the second portion of the order(see at least ¶ [0106] wherein the prescriber creates a time stamp within the system when the portion of the order that involves: contacting a prescriber via fax, is being processed by one of the protocols/applications.

Regarding **claim 35**, Helmus discloses the system of claim 1 wherein the first system comprises a first architecture and the second system comprises a second architecture but does not explicitly teach in exact words that the first architecture differs from the second architecture.

In the previous Office Action dated November 23, 2009 The Examiner took Official Notice that it was well known to those of ordinary skill in the art at the time of the invention to have two computer systems with architectures that differ from one another. Applicant has failed to adequately and timely traverse this statement therefore it is hereby taken to be admitted prior art.

Following KSR, the Supreme Court issued several rationales for supporting a conclusion that a claim would have been obvious. Exemplary rationales that may support a conclusion of obviousness include: Simple substitution of one known element for another to obtain predictable results (MPEP 2141).

Because each individual element and its function are shown in the prior art, albeit in different references or embodiments, the difference between the claimed subject matter and the prior art rests not on any individual element or function but in the very combination itself— that is in the substitution of a second system that explicitly has an architecture that differs from the first system, as was well known in the art at the time of the invention, for the second system disclosed by Helmus. The result of this substitution

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would have been predictable to those of ordinary skill in the art, at the time of the invention, specifically an order processing system such as the one disclosed by Helmus wherein the various systems processing the applications protocols have differing architectures. Thus, the simple substitution of one known element for another producing a predictable result renders the limitation obvious.

13. Claims 8, 9, 13-15, 20-24 and 26-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helmus (US 20030225595 A1) in view of Examiner's Official Notice and in further view of Waclawsky et al. (US 6850530 B1) - hereinafter Waclawsky.

Regarding **claim 8**, Helmus discloses a system for monitoring events processed by event processing applications implemented on computer systems, wherein the monitor component is further executable to aggregate the at least the portion of the first resource data and the at least the portion of the second resource data (see at least ¶ [0060], [0124]-[0125] as well as figures 17-18 of Helmus, which disclose the command and control module (CC module) as, "a user interface that sits atop the order processing system. The Command and Control module tracks work queue activity, individual user activity, process control information, system production and system resource availability." Therefore, as further illustrated by the sections of ¶ 124 included in the Applicant's remarks, the CC module monitors a plurality of work queues wherein each work queue corresponds to a particular application, or set of protocols, that is processing an aspect of the ordering process. Figure 18 illustrates this very well as it shows an example of the various instruments/applications that make up the order processing system. Each queue/application is clearly handling a specific function, for example

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HandleAdminProtocol or HandleProfessionalProtocol, and the CC module monitors, extracts and aggregates both application and resource data from the various applications.)

Helmus does not explicitly teach that the monitor component provides computer architecture information.

Waclawsky however, discloses aggregating resource usage information in a database allowing the user to isolate and improve bottlenecks in a computer architecture (see at least **col. 12, lines 35-60**).

In KSR, the Supreme Court particularly emphasized “the need for caution in granting a patent based on the combination of elements found in the prior art,” and discussed circumstances in which a patent might be determined to be obvious. Importantly, the Supreme Court reaffirmed principles based on its precedent that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” In this case the combination of the order processing system disclosed by Helmus and the computer resource monitoring system disclosed by Waclawsky would yield a predictable result, specifically an order processing system that tracked the computer resources being allocated to the applications and protocols disclosed by Helmus. It would have been obvious to one of ordinary skill in the art to modify the monitoring component of the system of Helmus to include providing a computer architecture information, because the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately. Furthermore one of ordinary skill in the art would have recognized that the results of the combination were predictable, therefore the combination has been deemed obvious.



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Regarding **claim 9**, the claim recites equivalent limitations to claim 8 except that monitor component provides capacity information. Helmus does not explicitly teach wherein the monitor component provides a computer capacity information.

Waclawsky however, discloses aggregating resource usage information in a database allowing the user to isolate and improve bottlenecks in a computer architecture. Waclawsky goes on to say that the invention uses this data to assist with capacity planning, thereby implying that an embodiment of the invention provides capacity information (see at least **col. 12, lines 35-60**).

In KSR, the Supreme Court particularly emphasized “the need for caution in granting a patent based on the combination of elements found in the prior art,” and discussed circumstances in which a patent might be determined to be obvious. Importantly, the Supreme Court reaffirmed principles based on its precedent that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” In this case the combination of the order processing system disclosed by Helmus and the computer resource monitoring system disclosed by Waclawsky would yield a predictable result, specifically an order processing system that tracked the computer resources being allocated to the applications and protocols disclosed by Helmus and provided capacity information in the manner disclosed by Waclawsky. It would have been obvious to one of ordinary skill in the art to modify the monitoring component of the system of Helmus to include providing a computer capacity information, because the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately. Furthermore one of ordinary skill in the art would have

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recognized that the results of the combination were predictable, therefore the combination has been deemed obvious.

Regarding **claims 13 & 14**, the Examiner has already asserted that the combination of Helmus and Waclawsky teaches the monitor component aggregating application and resource data and determining event status information using both the disclosed application data and the obtained resource data. Waclawsky further teaches wherein the resource data includes hardware statistics related to the computer system and the hardware statistics are a memory parameter of the computer system (see at least **col. 3, lines 26-58** wherein the resource data being analyzed includes hardware resources such as memory locations). Examiner's motivation for combining these two references has been previously presented.

Regarding **claim 15**, the Examiner has already asserted that the combination of Helmus and Waclawsky teaches the monitor component aggregating application and resource data and determining event status information using both the disclosed application data and the obtained resource data. Waclawsky further discloses a monitor component using resource data including memory data and resource allocation (see at least **col. 3, lines 26-58**) to determine resource/memory usage (see **col. 12, lines 35-60**). Examiner's motivation for combining these two references has been previously presented, however neither reference explicitly discloses allocating all memory on startup to cache memory.

In the Office Action dated April 28, 2009 the Examiner took Official Notice that it was well known to those of ordinary skill in the art, at the time of the invention, for computers to allocate all memory on startup to cache memory. This is a common startup

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technique for most personal computers, which Applicant even admits on page 12 of submitted disclosure. Applicant has failed to adequately and timely traverse this statement therefore it is hereby taken to be admitted prior art.

Following KSR, the Supreme Court issued several rationales for supporting a conclusion that a claim would have been obvious. If a particular known technique was recognized as part of the ordinary capabilities of one skilled in the art, and one of ordinary skill in the art would have been capable of applying this known technique to a known device (method, or product) and the results would have been predictable to one of ordinary skill in the art; then the claim will be deemed obvious in view of the prior art.

Applicant is applying a known technique, in this case allocating all memory on startup to cache memory, to a known device, in this case to the order processing system disclosed by Helmus, and is generating a predictable result. It would have been obvious, to one of ordinary skill in the art, that the result of applying the aforementioned technique would be an order processing system that allocated all memory to cache memory on startup. Therefore since the Applicant is claiming the application of a known technique to a known device to yield a predictable result, the claim is deemed obvious in view of the prior art.

Regarding **claim 20**, Helmus discloses a system and method for monitoring order processing in an order processing system including applications operating on computer systems events, the method comprising:

- Processing, by a first application stored in a first memory and executed by a first computer system, at least a portion of an order (See ¶ [0048]-[0064])

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- Writing by the first application, first application data related to the first application processing the order to a first application log file (see at least ¶ [0057]-[0061] wherein a variety of processors are disclosed which handle different events in the order processing workflow. For example, the order review processor, the order header processor and the workflow processor are some of the high level applications which monitor events, such as Image Processing and Exception Handling, in the order processing workflow. Furthermore ¶ [0093]-[0094] and fig. 18 disclose a plurality of protocols. Each order will have a set of protocols which must be resolved so that the order can be completed. These protocols represent sub activities/events, which must be processed before an order can be completed, and are often times implemented by specific applications/instruments as illustrated by fig 18. The system stores and tracks these protocols in memory, and it is these memory files (see claim 44), which house the various protocols and processor information, that are equivalent to the Applicant's log files. Fig 18. also clearly illustrates that each of these log files is constantly monitoring the parameters/data that pertain to its specific function in the order processing process).
- writing, by a first log agent stored in a memory and executed by the first computer system, to a first resource log file first resource information related to the first computer system whereon the first application processes the order (see at least ¶ [0060] wherein the information being monitored and stored in the system's memory files includes resource information);

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- Processing, by a second application stored in a first memory and executed by a first computer system, at least a portion of an order (See ¶ [0048]-[0064]);
- Writing by the second application, second application data related to the second application processing the order to a second application log file (see at least ¶ [0057]-[0061] wherein a variety of processors are disclosed which handle different events in the order processing workflow. For example, the order review processor, the order header processor and the workflow processor are some of the high level applications which monitor events, such as Image Processing and Exception Handling, in the order processing workflow. Furthermore ¶ [0093]-[0094] and fig. 18 disclose a plurality of protocols. Each order will have a set of protocols which must be resolved so that the order can be completed. These protocols represent sub activities/events, which must be processed before an order can be completed, and are often times implemented by specific applications/instruments as illustrated by fig 18. The system stores and tracks these protocols in memory, and it is these memory files (see claim 44), which house the various protocols and processor information, that are equivalent to the Applicant's log files. Fig 18. also clearly illustrates that each of these log files is constantly monitoring the parameters/data that pertain to its specific function in the order processing process);
- writing, by a second log agent stored in a memory and executed by the second computer system, to a second resource log file second resource information related to the second computer system whereon the first application processes

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the order (see at least ¶ [0060] wherein the information being monitored and stored in the system's memory files includes resource information and ¶ [0136] wherein the disclosed invention has an embodiment where different systems/computers perform each of the various processor functionalities).

- Extracting, by a plurality of corresponding log adapters, each stored in a memory and executed by a processor to communicate with a corresponding one of the first application log file, the second application log file, the first resource log file, and the second resource log file to extract at least a portion of the corresponding one of the first application data, the second application data, the first resource data, and the second resource data (see at least ¶ [0060] wherein the Command and Control Processor is in communication with each system processor and provides an interface through which real time information regarding, for example, system queues, order location, system resources, and system production is displayed, managed and processed. The CC processor therefore extracts the various protocol/processor information from each of their respective memory files and displays it for the user.);
- Aggregating by a monitor component stored in a memory and executed by a processor to communicate with the plurality of log adapters, at least portion of the first application data, at least the portion of the second application data, at least the portion of the first resource data, and at least the portion of the second resource data (see at least ¶ [0060], [0124]-[0125] as well as figures 17-18 of Helmus, which disclose the command and control module (CC module) as, “a user interface that sits atop the order processing system. The

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Command and Control module tracks work queue activity, individual user activity, process control information, system production and system resource availability.” Therefore, as further illustrated by the sections of ¶ 124 included in the Applicant's remarks, the CC module monitors a plurality of work queues wherein each work queue corresponds to a particular application, or set of protocols, that is processing an aspect of the ordering process. Figure 18 illustrates this very well as it shows an example of the various instruments/applications that make up the order processing system. Each queue/application is clearly handling a specific function, for example HandleAdminProtocol or HandleProfessionalProtocol, and the CC module monitors, extracts and aggregates both application and resource data from the various applications.)

Helmus does not explicitly teach in exact words that the resource information being written, stored, extracted etc. is hardware information. However, Waclawsky discloses aggregating resource usage information in a database that is indeed hardware information which allows the user to isolate and improve bottlenecks in a computer architecture (see at least **col. 12, lines 35-60**).

In KSR, the Supreme Court particularly emphasized “the need for caution in granting a patent based on the combination of elements found in the prior art,” and discussed circumstances in which a patent might be determined to be obvious. Importantly, the Supreme Court reaffirmed principles based on its precedent that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” In this case the combination of the

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order processing system disclosed by Helmus and the computer resource monitoring system disclosed by Wacławsky would yield a predictable result, specifically an order processing system wherein the resource information being tracked is explicitly hardware information regarding the applications and protocols disclosed by Helmus. It would have been obvious to one of ordinary skill in the art to modify the monitoring component of the system of Helmus so that the resource information is specifically hardware information, because the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately. Furthermore one of ordinary skill in the art would have recognized that the results of the combination were predictable, therefore the combination has been deemed obvious.

Helmus also does not explicitly disclose that the various systems referenced in ¶ [0136] to be performing the disclosed steps and functionalities have different architectures.

The Examiner hereby takes official notice that it was well known to those of ordinary skill in the art, at the time of the invention, for different computing systems to have different architectures and still be able to interact and share information regarding the execution of certain processes, including workflow/business processes. For example in supply chain management it was well known for clients to each have versions of a software client running on their own personal computers, wherein the computers themselves may have any number of different architectures. For example some might have 1GB of RAM while others may have 2GB, or there may be any number of minor differences in the hardware architectures of the systems themselves; and yet despite these



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architecture differences clients are still able to implement/access software that updates them on the operations of the supply chain and to interact with each other by sending notifications, order updates etc. without requiring that every single client in the entire supply chain system have completely identical computer architectures. It would have been obvious to modify the invention of Helmus so that the various computer systems referenced in ¶ [0136] include computer systems that have different architectures in order to ensure that the invention is as flexible, and therefore useful as possible. This would allow Helmus' order processing system to be applied to a much wider variety of computing systems which would improve the overall utility of the invention.

Regarding **claim 21**, Helmus discloses the method of claim 20, further comprising using, by the monitor component, at least one of the at least the portion of the first application data and the at least the portion of the second application data to determine a status of the order (see ¶ [0125] which discloses that the CC processor produces status reports on any single, or combination of, system data item(s) thereby keeping the user informed of the status of the orders associated with said data items).

Regarding **claim 22**, the Examiner has previously asserted that Helmus discloses a method for monitoring order processing by an order processing system including applications operating on computer systems, the method comprising generating application data and using the application data to determine the status of one or more orders. Helmus does not however, explicitly teach wherein the status of the orders includes a percentage complete of processing of the one or more orders.

In the Office Action dated April 28, 2009 the Examiner took Official Notice that it was well known to those of ordinary skill in the art, at the time of the invention, for

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status reports to include a percentage complete statistic of the variable being monitored, for example when downloading documents. Applicant has failed to adequately and timely traverse this statement therefore it is hereby taken to be admitted prior art.

In KSR, the Supreme Court particularly emphasized “the need for caution in granting a patent based on the combination of elements found in the prior art,” and discussed circumstances in which a patent might be determined to be obvious. Importantly, the Supreme Court reaffirmed principles based on its precedent that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” In this case the combination of the order status reports disclosed by Helmus and a percentage complete statistic would yield a predictable result, specifically an order status report that included a statistic indicating the percentage of order processing that has been completed. It would have been obvious to one of ordinary skill in the art to modify the status reports of Helmus to include the percentage of order processing that has been completed because the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately. Furthermore one of ordinary skill in the art would have recognized that the results of the combination were predictable, therefore the combination has been deemed obvious.

Regarding **claim 23**, Helmus discloses a method for monitoring order processing by an order processing system including applications operating on computer systems, the method comprising generating application data and using the application data to determine the status of one or more orders, wherein the status of the orders includes identifying the particular application currently processing the order (see **fig. 18**).

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Regarding **claim 24**, Helmus discloses a method for monitoring order processing by an order processing system including applications operating on computer systems, the method comprising generating application data and using the application data to determine the status of one or more orders in order to reduce order processing time (see ¶ [0016]). Helmus does not explicitly teach that the status of the orders includes the processing time of the one or more orders by the particular application.

In the Office Action dated April 28, 2009 the Examiner took Official Notice that it was well known to those of ordinary skill in the art, at the time of the invention, for status reports to include a processing time statistic for the variable being monitored. For example in quality control environments it was well known to determine the processing time required to complete the various tasks that comprise a particular order so that industrial engineers can then determine if and where the process can be further optimized. Applicant has failed to adequately and timely traverse this statement therefore it is hereby taken to be admitted prior art.

In KSR, the Supreme Court particularly emphasized “the need for caution in granting a patent based on the combination of elements found in the prior art,” and discussed circumstances in which a patent might be determined to be obvious. Importantly, the Supreme Court reaffirmed principles based on its precedent that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” In this case the combination of the order status reports disclosed by Helmus and a processing time statistic would yield a predictable result, specifically an order status report that included a statistic indicating the processing time required for the order in question. It would have been obvious to one of

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ordinary skill in the art to modify the status reports of Helmus to include the processing time of the one or more orders by the particular application, because the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately. Furthermore one of ordinary skill in the art would have recognized that the results of the combination were predictable, therefore the combination has been deemed obvious.

Regarding **claim 26**, Helmus discloses the method of Claim 20 further comprising providing a graphical user interface identifying each of the applications processing the orders (see **fig 18**). Helmus does not explicitly teach the graphical user interface further identifying the processing time spent by each application on the processing of the orders

In the Office Action dated April 28, 2009 the Examiner took Official Notice that it was well known to those of ordinary skill in the art, at the time of the invention, for status reports to include a processing time statistic for the variable being monitored. For example in quality control environments it was well known to determine the processing time required to complete the various tasks that comprise a particular order so that industrial engineers can then determine if and where the process can be further optimized. Applicant has failed to adequately and timely traverse this statement therefore it is hereby taken to be admitted prior art.

In KSR, the Supreme Court particularly emphasized “the need for caution in granting a patent based on the combination of elements found in the prior art,” and discussed circumstances in which a patent might be determined to be obvious. Importantly, the Supreme Court reaffirmed principles based on its precedent that “[t]he combination of familiar elements according to known methods is likely to be obvious

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when it does no more than yield predictable results.” In this case the combination of the graphical user interface disclosed by Helmus and a processing time statistic would yield a predictable result, specifically a graphical user interface identifying each of the applications processing the orders that included a statistic indicating the processing time required for the order in question. It would have been obvious to one of ordinary skill in the art to modify the GUI of Helmus to include the processing time of the one or more orders by the particular application, because the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately. Furthermore one of ordinary skill in the art would have recognized that the results of the combination were predictable, therefore the combination has been deemed obvious.

Regarding **claim 27**, Helmus discloses the method of Claim 20 further comprising providing a graphical user interface identifying each of the applications processing the orders, the graphical user interface further identifying the total number of orders received by each of the applications (see at least ¶ [0125]-[0128] and **fig. 18**).

Regarding **claim 28**, Helmus discloses the method of Claim 20, further comprising:

- providing a first graphical user interface operable for monitoring orders (see **fig 18-22**;
- providing a second graphical user interface operable for monitoring the computer systems (see ¶ [0124] wherein the command and control module allows users to extract information on any single queue or groups of queues, which represent various applications processing orders. This

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information includes hardware statistics like system production and system resource availability.); and

- providing a third graphical user interface for detailing order processing totals and application processing totals (see at least ¶ [0128] and **fig. 20**).

Regarding **claim 29**, Helmus discloses the method of Claim 28, further comprising:

- selecting by the first graphical user interface at least one order to monitor (see ¶ [0123]-[0128]);
- searching, by the monitor components, the at least the portion of the first application data and the at least a portion of the second application data for the at least one orders selected (see ¶ [0125]-[0126]); and
- providing, via the first graphical user interface, an order report identifying the current status of an order (see ¶ [0123]-[0128] wherein the user interface allows users to drill down the entries using hyperlinks to their supporting data. Furthermore ¶ [0124] explicitly discloses that the interface produces status reports for the orders being processed.).

Regarding **claim 30**, Helmus discloses the method of Claim 29, further comprising:

- establishing an alarm threshold for an application related to processing of the orders (see ¶ [0130]);
- notifying, via the first graphical user interface, when the alarm threshold has been exceeded (see ¶ [0130]).

Regarding **claim 31**, the claims recites equivalent limitations to claim 30 except that it is directed to one or more orders. The system disclosed by Helmus processes one or more orders therefore this limitation is insufficient to distinguish claim 31 over the prior art applied to claim 30.

Regarding **claim 32**, Helmus discloses the method of claim 28 further comprising:

- providing an architectural components illustration of the computer system via the second graphical user interface (see **fig. 18**);
- selecting one of the architectural components illustrated by the second graphical user interface; and providing, via the second graphical user interface, component details of the selected architectural component (see ¶ [0124] wherein the command and control module allows users to extract information on any single queue or groups of queues, which represent the various applications, or computer architecture components, processing orders. The extracted information includes component details like system production and system resource availability.)

Regarding **claim 33**, Helmus discloses the method of Claim 31, further comprising notifying, via pager, when the alarm threshold has been exceeded (see ¶ [0130]).

14. Claims 25 and 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helmus (US 20030225595 A1) in view of Examiner's Official Notice and Waclawsky et al. (US 6850530 B1) and further in view of Gal-On et. al (US20030171907 A1) – hereinafter Gal-On.

Regarding **claim 25**, Helmus discloses the method of Claim 20, further comprising:

- graphically illustrating an architecture of the computer systems used by the applications to process portions of the orders (see at least **fig. 18**);

Helmus does not explicitly teach selecting by the graphical user interface a hardware component of an illustrated architecture; and displaying, by a GUI, hardware statistics of the selected hardware component.

Gal-On however, discloses a method and system for optimizing applications on processors that allows users to display hardware statistics of selected hardware component in an architecture (See at least ¶ [0028]-[0036], [0077]-[0078] and claim 21).

In KSR, the Supreme Court particularly emphasized “the need for caution in granting a patent based on the combination of elements found in the prior art,” and discussed circumstances in which a patent might be determined to be obvious. Importantly, the Supreme Court reaffirmed principles based on its precedent that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” In this case the combination of the order processing system and graphical display interface disclosed by Helmus and the hardware optimization apparatus and method disclosed by Gal-On. would yield a predictable result, specifically an order processing system that allowed users to select and display statistics in the manner disclosed by Gal-On to the protocols and applications processing orders disclosed by Helmus. It would have been obvious to one of ordinary skill in the art to modify the GUI, system and method disclosed by Helmus to include selecting by the graphical user interface a hardware component of an illustrated



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architecture; and displaying, by a GUI, hardware statistics of the selected hardware component, because the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately. Furthermore one of ordinary skill in the art would have recognized that the results of the combination were predictable, therefore the combination has been deemed obvious.

Regarding **claim 36**, the claim merely combines the limitations recited in claims 20 and 25. Accordingly this claim is rejected for the reasons presented above in the aforementioned rejections of claims 20 and 25.

Regarding **claims 37-38**, Helmus does not explicitly teach hardware statistics related to the computer system wherein the statistics are defined as memory parameters.

Gal-On however, discloses a method and system for optimizing applications on processors that allows users to display hardware statistics of selected hardware component in an architecture (See at least ¶ [0028]-[0036], [0077]-[0078] and claim 21) wherein the statistics are further defined as a memory parameter of the computer system (See ¶ [0065] wherein the statistic measures memory utilization).

In KSR, the Supreme Court particularly emphasized “the need for caution in granting a patent based on the combination of elements found in the prior art,” and discussed circumstances in which a patent might be determined to be obvious. Importantly, the Supreme Court reaffirmed principles based on its precedent that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” In this case the combination of the

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order processing system and graphical display interface disclosed by Helmus and the hardware optimization apparatus and method disclosed by Gal-On. would yield a predictable result, specifically an order processing system that allowed users to select and display hardware statistics, including those explicitly directed towards memory parameters, in the manner disclosed by Gal-On to the protocols and applications processing orders disclosed by Helmus. It would have been obvious to one of ordinary skill in the art to modify the GUI, system and method disclosed by Helmus to include selecting by the graphical user interface a hardware component of an illustrated architecture; and displaying, by a GUI, hardware statistics of the selected hardware component, because the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately. Furthermore one of ordinary skill in the art would have recognized that the results of the combination were predictable, therefore the combination has been deemed obvious.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adrian J. McPhillip whose telephone number is (571)270-5399. The examiner can normally be reached on Monday to Thursday 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Boswell can be reached on (571)272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/A. J. M./

Examiner, Art Unit 3623

2/12/2011

/Beth V. Boswell/

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